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SHAFT-SEALING STRUCTURE IN VACUUM PUMP

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ABSTRACT

PROBLEM TO BE SOLVED: To provide a shaft - sealing structure, capable of achieving long service life of a lip seal , while ensuring superior sealing performance in a vacuum pump.

SOLUTION: Lip seals 45, 46, 45A,46A are mounted on the peripheral faces of rotary shafts 19, 20, respectively located between radial bearings 37, 38 and rotors 27, 32. A rubber lip ring 452 of the lip seals 45, 45A is mounted on a gear accommodating chamber 331 side. A fluororesin lip ring 463 of the lip seals 46, 46A is mounted on the pump room 43 side. Backing pressure chambers 49, 50 between the rubber lip ring 452 and the fluororesin lip ring 463 communicates with the gear accommodating room 331 via ventilation passages 51, 52.

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